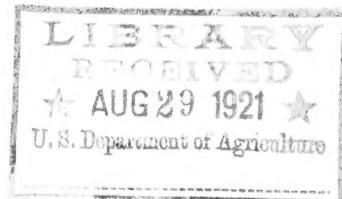


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INSECT PEST SURVEY

Bureau of Entomology, U. S. D. A.
and
State Entomological Agencies, cooperation



Special Report No. 10.

April 25, 1921.

JOINT WORM VERY NUMEROUS IN TENNESSEE

Harmolita grandis, Riley

Tennessee. Mr Geo. Ainslie of the Bureau of Entomology under date of April 14, reports from Knoxville, as follows: "I have never seen so much joint worm as there is this year. Almost every field visited has an appreciable amount and in some places it is very severe. When we first found it the progeny of the minutum adults were about half grown in the little deformed tillers. Now they are rapidly pupating, and unless something happens to prevent their emergence and oviposition it seems certain that the next generation will be large enough to take practically every stem. The fields seem generally infested too, not in patches but uniformly throughout. A good deal of wheat land was replanted to wheat last Fall, here of course no migration is necessary."

FURTHER NOTES ON SEED CORN MAGGOT IN POTATOES

Hylemyia cilicrura Rond.

(Formerly Pegomyia fusciceps)

Virginia. Professor W. J. Schoene, State Entomologist of Virginia, under date of April 18 reports: "We have had a number of reports from the Truck Experiment Station, from County Agents, and from Dr. F. P. Fromme, the Plant Pathologist at the Experiment Station regarding the prevalence of the Seed Corn Maggot (Phorbia fusciceps) in Eastern Virginia."

Dr. Fromme has just spent a number of days in Eastern Virginia, in going over some of the potato fields. He reports that he is of the opinion that the Seed Corn Maggot is not responsible for the primary injury; that the chief difficulty is that the potatoes are affected with the fusarium rot which is the primary cause of the trouble. Dr. Fromme tells me that this Fusarium disease of potatoes requires a very high temperature for development and it appears that the high temperatures were present at the planting time in the Eastern Shore this year. He further reports that he found some potatoes which were rotting and which were not infested with the maggot.

Some years ago in making collections of the closely related species Pegomyia brassica I very frequently took the larvae of the seed corn maggot and I was unable to find these larvae in any but ~~dying~~ "dying" tissue."

Mr. M. Shapovalov of the Bureau of Plant Industry in a report dated April 11-14 says: "The outbreak in Eastern Virginia is quite general. Some perfect fields, or portions of fields, are to be found in central and northern Northampton County, but 15 per cent of missing hills is very

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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be carefully documented to ensure the integrity of the financial data. This section also outlines the procedures for reconciling accounts and identifying discrepancies.

In the second section, the author details the various methods used to collect and analyze data. This includes the use of statistical software, manual calculations, and the application of mathematical models to predict future trends. The importance of data quality and the need for regular audits are also highlighted.

The third part of the document focuses on the implementation of the findings. It provides a step-by-step guide for developing a strategic plan, from setting clear objectives to allocating resources and monitoring progress. The author stresses the need for flexibility and adaptability in the face of changing circumstances.

Finally, the document concludes with a summary of the key points and a call to action. It encourages the reader to take the time to review the information presented and to apply the principles discussed to their own work. The author expresses confidence that the reader will find the document informative and useful.

common, 25 to 30 per cent is frequent, and 50 to 75 per cent has been observed.

The destruction is apparently brought about by two agencies: The Seed-corn Maggot and Fusarium spp. In certain cases the animal and plant parasites act singly and independently. In others they work together, making exact determination of the cause of trouble impossible. It appears that insect injury is predominant on the mainland while fungous rot was the outstanding feature on the Peninsula.

On examination of a considerable number of hills clear cases of maggot injury could be seen.

High temperature with low rainfall at planting time, soil type and drainage, storage and handling of the seed, and method of fertilizer application, also seemed to be secondary limiting factors in individual cases in the extent of damage in this region,

Mr. W. H. White, of the Office of Truck Crop Insect Investigations of the Bureau of Entomology, reports, under date of April 21, 1921, that the failure of the potatoes to germinate in a normal manner in some of the fields in the vicinity of Norfolk, Va., was due, in the writer's opinion, to the attack of maggots in some instances and to a fungus in others. In cases where the potatoes germinated but made a very slow growth and produced unhealthy plants, it was due to the attack of the maggot, in many instances accompanied by rot. But in cases where the potatoes failed to germinate, fungus was always present. It would be impossible to estimate the damage caused by either of these agencies, because a large percentage of the seed pieces after being attacked germinated and the plant developed but with much less vigor than under normal conditions and it is not possible that these plants will produce a full crop. During the warm weather of March, the adult of the seed-corn maggot was very active and the flies were attracted to the potato fields by the decaying organic matter in the form of organic fertilizer, such as fish scrap, tankage and dried blood. The plowing under of kale was also an attraction for the flies, as maggots of this species were usually abundant in such fields. Where uncut potatoes were examined, they did not show any indication of either fungus or maggot injury.

Maryland. Professor E. N. Corey, State Entomologist of Maryland, reports under date of April 23 that he received specimens from Hurlock, Maryland, with the following communication: "Under separate cover I am sending you a few pieces of potatoes I planted several weeks ago and I find that they are full of little worms which I am sure you will notice. They were planted on land on which crimson clover was turned under and the seed is home grown. I also planted some Northern seed which does not show any rot."

[illegible][illegible]